



Underground Storage Tank Program Application for Permit to Operate

Submit Completed Original Form To:

UST Program
S.C. Department of Health and Environmental Control
2600 Bull Street
Columbia, S.C. 29201
Telephone: (803) 896-6240
Fax: (803) 896-6245
www.scdhec.gov/ust

South Carolina Underground Storage Tank Control Regulations (SCUSTCR R.61-92) require that the person who proposes to place a new underground storage tank (UST) system in operation must apply for a permit, on a form supplied by the Department, and possess said permit prior to placing the tank in operation (SCUSTCR R.61-92 Part 280.23). All owners and operators of new UST systems must ensure that the installer certifies in the Permit to Operate application that the methods used to install the tanks and piping comply with the requirements in Part 280.20 of SCUSTCR.

I. REGISTRATION AND SITE INFORMATION

Facility Name or Company Site Identifier _____

Street Address or State Road (as applicable) _____

City _____

County _____

SCDHEC Permit ID Number _____

II. TANK INFORMATION

Tank Capacity (gallons)

If compartmented list each compartment

Material of Construction (check one):

Steel/w anodes

Fiberglass-Reinforced Plastic (FRP)

Steel-FRP Composite

Steel - Polyurethane

Other (specify)

Serial No. Of Tank(s)

1	2	3	4	5

III. TANK INFORMATION (Continued)

Tank Manufacturer _____

IV. TANK INSTALLATION

The tank installation checklist provided by the tank manufacturer must be submitted in addition to the following information:

	YES	NO
Manufacturer's tank installation checklist attached?	[]	[]
Backfill: Sand [] Gravel [] Other (specify) _____		
Backfill should be clean, washed, well-granulated, free-flowing, noncorrosive, inert material: sand, crushed rock, or pea gravel. The largest particle should not be larger than 3/4 inch. It should be free of debris, rock, ice, snow, or organic material.		
Does the backfill used meet the above definition?	[]	[]
Amount of backfill under tanks (Minimum of 12" required) _____		
Horizontal clearance from excavation walls and other tanks _____ (Minimum of 12" required for steel and steel-FRP composite USTs, 18" for FRP)		
Does distance from the top of the tank to final grade exceed tank diameter for steel tanks; 7' for FRP tanks?	[]	[]
Backfill tamped under lower quadrant of tanks to fill voids?	[]	[]
If sand backfill is used, compacted to ensure adequate support of tank and prevent movement or settlement?	[]	[]
List method of compaction: Sand-slurry method []		
Mechanical []		
Other (specify) _____		
Was water encountered during the installation?	[]	[]
Tanks anchored?	[]	[]
If yes, list method of anchoring _____		
If steel tanks used, electrically isolated from anchor straps?	[]	[]
Anchor straps dielectrically coated and cathodically protected?	[]	[]
Tanks cathodically protected?	[]	[]
If yes, specify type of protection: Sacrificial anode []		
Impressed Current []		
If sacrificial anode used, protective cover removed?	[]	[]
Where is test wire for system located? _____		

IV. TANK INSTALLATION (Continued)

	YES	NO
Electrical isolation of steel tank verified after piping connected?	[]	[]
Tanks out of traffic area	[]	[]
Covered by: At least 2 feet compacted backfill [] or;		
At least 1 foot compacted backfill + 4" reinforced concrete slab []		
Slab extends 1 foot beyond tank outlines?	[]	[]
Tanks in traffic area	[]	[]
Covered by: At least 2.5 feet compacted backfill + 6" asphalt paving [] or;		
At least 1.5 feet compacted backfill + 8" reinforced concrete slab []		
Slab extends 1 foot beyond tank outlines?	[]	[]

V. PIPE INFORMATION

Company Tank Number	1	2	3	4	5
Material of Construction (check one) Steel					
Fiberglass-Reinforced Plastic (FRP)*					
Flexible					
Other (specify)					

* How were metal components of system (ex: flex connectors) protected from corrosion?

VI. PIPE INSTALLATION

The piping installation checklist provided by the manufacturer must be submitted in addition to the following information. All metal components of piping systems (flex connectors, swing joints, check valves, etc.) that are in contact with backfill (not housed in an acceptable secondary containment) must be cathodically protected.

Backfill: sand [] gravel [] Other (specify) _____

Backfill used for piping must meet the same requirements as described for TANK INSTALLATION above. Does the backfill used meet the above definition? [] []

Product lines located in a single trench? [] []

Vent lines located in a single trench? [] []

Does piping pass over tanks? [] []

All piping sloped at least 1/8" per foot from dispenser(s) to tank(s)? [] []

Amount of backfill below all piping: (Minimum of 6" required) _____

VI. PIPE INSTALLATION (Continued)

	YES	NO
Amount of backfill above all piping: (Minimum of 6" required) _____		
Amount of backfill to the side of all piping: (Minimum of 6" required) _____		
All piping separated by at least twice pipe diameter?	[]	[]
If sand backfill is used, compacted to ensure adequate support of piping and prevent movement or settlement?	[]	[]
List method of compaction: Sand-slurry []		
Mechanical []		
Other (specify) _____		
Piping out of traffic area	[]	[]
Covered by: At least 2 feet compacted backfill [] or;		
At least 1 foot compacted backfill + 6" reinforced concrete slab []		
Piping in traffic area	[]	[]
Covered by: At least 6" compacted backfill and additional backfill + paving equal to 18" of material from top of piping to bottom of grade?	[]	[]
Metal piping systems and metal components of other systems cathodically protected and coated with suitable dielectric material?	[]	[]
Sacrificial anodes attached to piping by: thermite weld []		
mechanical clamp []		
(DO NOT USE HOSE CLAMPS)		
Attachments coated with dielectric material?	[]	[]
Sacrificial anodes surrounded by native soil, five feet from the piping trench and below the level of the piping?	[]	[]
Electrical isolation of piping from steel tank and aboveground piping verified after piping completed?	[]	[]
Continuity of wiring between sacrificial anode and piping tested before backfilling?	[]	[]
250/300# unions with metal seats used for all connections? (DO NOT USE THREAD PROTECTORS FOR UNIONS.)	[]	[]
If pressurized pumping system used, line leak detection installed and operating?	[]	[]
If suction pumping system used, type of check valve used: Foot [] Angled [] Vertical []		
Piping tested for at least one hour at 45 psi and soaped to check for leaks?	[]	[]

VII. SPILL AND OVERFILL PREVENTION EQUIPMENT

	<u>YES</u>	<u>NO</u>
Spill prevention equipment installed?	[]	[]
Type		
Surface mounded to channel water away from spill prevention equipment?	[]	[]
Overfill prevention equipment installed?	[]	[]
Type		
Droptubes installed?	[]	[]

VIII. RELEASE DETECTION

(CHECK ALL THAT APPLY)

Manual tank gauging (tank only) []

Tank tightness testing with inventory control (tank only) []

SIR []

Automatic tank gauge (tank only) []

Type

Interstitial monitor within secondary barrier for tank []; for piping []

Type (Specify for both tank and piping)

Vapor monitoring wells []

WELLS MUST MEET THE FOLLOWING CONSTRUCTION STANDARDS

	<u>YES</u>	<u>NO</u>
1. Well screen at least 2" diameter with 0.020" factory perforated slots?	[]	[]
2. Depth at least two feet below bottom of tanks	[]	[]
3. Grouted above the screen with a neat cement to prevent infiltration of surface contamination?	[]	[]
4. Upper 12" of well cased?	[]	[]
5. Well equipped with a locking device?	[]	[]
6. Clearly marked as a MONITORING WELL with a black equilateral triangle on a white background on cover?	[]	[]
7. Surface mounded to channel water away from well?	[]	[]

Ground-water monitoring wells []

VIII. RELEASE DETECTION Continued

WELLS MUST MEET THE SAME CONSTRUCTION DETAILS REQUIRED FOR VAPOR MONITORING WELLS

1. Well meets standards 1-7 as described for vapor monitoring wells?..... ☐ ☐
2. Ground water was encountered at _____ feet below grade.
3. Top of well screen set at _____ feet below grade.
4. Bottom of well screen set at _____ feet below grade.

Other method (Specify) ☐ _____

IX. WATER SUPPLY WELLS

YES NO

Are there any water supply wells navigable waters or coastal zone critical areas within 100 feet of any component (tanks, lines, dispensers) of the UST system? ☐ ☐

X. SECONDARY CONTAINMENT

(Check all that apply.)

	Tanks	Piping
Double Walled	<input type="checkbox"/>	<input type="checkbox"/>
Single Walled	<input type="checkbox"/>	<input type="checkbox"/>
External Impermeable Liner	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) _____		
Not applicable	<input type="checkbox"/>	<input type="checkbox"/>

XI. INSTALLATION

All tanks and piping must be properly installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions (SCUSTCR R.61-92, Part 280.20e). If a code of practice and the manufacturer's instructions are not in agreement concerning an installation standard, then the more environmentally protective of the two must be used.

Indicate which standard(s) was used to oversee the tank system installation.

- ☐ American Petroleum Institute Publication 1615, "Installation of Petroleum Storage Systems."
- ☐ Petroleum Equipment Institute Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems."
- ☐ American National Standards Institute Standard B31.3 "Petroleum Refinery Piping", and American National Standards Institute Standard B31.4 "Liquid Petroleum Transportation Piping System."

XII. CERTIFICATION OF INSTALLATION

Owners and operators must ensure that one or more of the following methods of certification, testing, or inspection is used to demonstrate compliance with Section X. Indicate which methods were used to meet this requirement:

- ☐ The installer is certified by tank and piping manufacturers.
- ☐ The installer is certified or licensed by SCDHEC*
- ☐ The installation has been inspected and certified by a SC registered professional engineer with education and experience in underground storage tank system installation (attach report).
- ☐ The installation has been inspected and by SCDHEC
- ☐ All work listed in the manufacturer's installation checklists have been completed.
- ☐ The owner and operator has complied with another method for ensuring compliance with this section that has been determined by SCDHEC to be no less protective of human health and the environment.**

Specify: _____

* Currently not applicable

XIII. PNEUMATIC AND HYDROSTATIC TEST RESULTS, SPECIAL CONDITIONS

	YES	NO
Pneumatic test results for tanks and piping attached?	[]	[]
Hydrostatic test results for tanks and piping attached?	[]	[]
Documentation for any special conditions listed on the Permit to Construct attached?	[]	[]

XIV. NOTES, ADDITIONAL INFORMATION

[illegible]

XV. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information and installing the UST system, I believe that the submitted information is true, accurate and complete.

Name of owner or owner’s authorized representative (type or print) Title

Signature Date

Name of installer (type or print)

Signature Date

Original signatures must be submitted